

**REMARKS**

Claims 36-38, 42-47, 51-54, 56 and 57 are pending in this action. Claims 47, 51 and 56 have been canceled by this Amendment.

**I. Rejection Under 35 U.S.C. § 112, second paragraph.**

The Examiner has rejected claims 47, 51, and 56 under 35 U.S.C. § 112, second paragraph as being indefinite.

As noted above, claims 47, 51, and 56 have been canceled. Thus, it is submitted that the Examiner's rejections are no longer applicable. Reconsideration and withdrawal of the rejections are respectfully requested.

**II. Rejection Under 35 U.S.C. § 112 - Lack of Written Description.**

The Examiner has rejected claims 36-38, 42-47, 51-54, 56, and 57 under 35 U.S.C. § 112, first paragraph, contending that the claims fail to comply with the written description requirement. Specifically, the Examiner asserts that the specification does not appear to provide literal support or adequate descriptive support for the recitation of "structural element (a) ... is the ester group of the acrylate or vinyl ester polymer" to which the linker is attached by a hydrogen bond.

The applicants respectfully traverse the rejection.

It is well settled that the subject matter of a claim need not be literally described in the specification in order to satisfy the written description requirement. M.P.E.P. 2163.02. Indeed, the relevant factual inquiry is whether the invention is clearly conveyed by the specification as a whole to those skilled in the art at the time the application is filed, regardless of the specific words used. A specification is read from the perspective of a person of skill in the art, who as a matter of law, is charged with all knowledge related to the state of the art at the time the invention is filed.

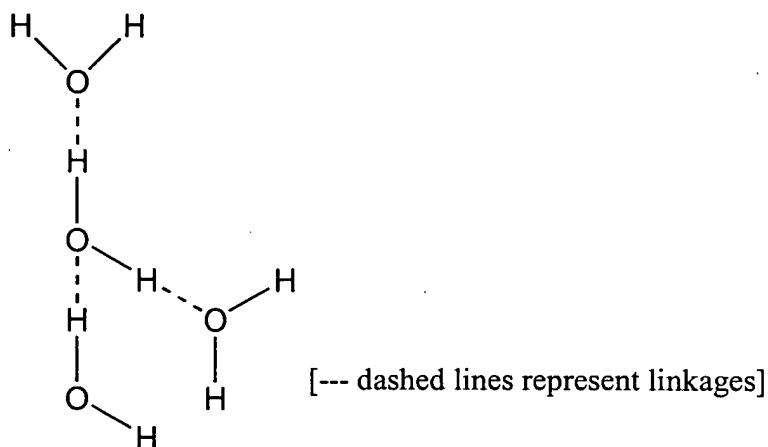
In the present circumstances, the specification supports the claims as amended for the description provided communicates the chemical structures that are now more clearly recited in the claims under well settled chemical principles.

In the present circumstances, a person of skill in the art, having knowledge of basic chemical principles and structures, would have understood that claim 57 as amended does not recite new subject matter, but rather describes the same chemical structure using different words than those used in the previous versions of the claims and is described in the specification at, *e.g.*, pages 2-7.

The specification and the claims as filed make clear that the structural element (a) has at least two characteristics:

- (1) it is derived from a carboxylic acid (COOH) and
- (2) it is capable of forming a hydrogen bond.

A person of skill would have had knowledge that a hydrogen bond is formed when a hydrogen of one molecule is attracted to two unshared electrons of a second molecule. A linkage is formed between the hydrogen atom, functioning as the positive end of one molecule and a the atom having the unshared electrons, which serves as an electronegative end of the second molecule. Below, a schematic representation of hydrogen bond formation between water molecules is shown.



A person of skill would have easily understood that the only group within the acrylate or vinylester polymers of feature (a) of claim 57 that is derived from a carboxylic acid group and which is capable for forming a hydrogen bond is the ester group of the polymers (R-C(=O)-O-R'). The specification therefore adequately supports the claims as amended.

In view of the foregoing, it is respectfully submitted that a person of ordinary skill in the art, upon review of the specification and the specific chemical structures described in both the claims and the specification, would have understood that the ester group of the acrylate or

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vinylester polymer is the only group within the recited polymer that could possibly form a hydrogen bond with the linker.

Accordingly, it is requested that the Examiner reconsider and withdraw the rejection.

**CONCLUSION**

Reconsideration and allowance of the claims at the earliest opportunity is respectfully requested.

Respectfully submitted,

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